

RM-9151

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the matter of

Amendment of Section 73.202(b)
Table of Assignments
FM Broadcast Stations

(La Fayette, Georgia)

RM- _____

To: Chief, Allocations Branch

SUPPLEMENT TO PETITION FOR RULE MAKING

Tennessee Instructional Radio, by its counsel, hereby supplements its Petition for Rule Making filed April 22, 1997, which asked that the Commission amend the Table of FM Allotments to delete Channel 298A at La Fayette, Georgia. The purpose of this supplement is to provide additional information concerning the potential for electromagnetic interference to FAA facilities should a station on Channel 298A at La Fayette be constructed.

1. The Petition for Rule Making described how the sole applicant for the channel, Radix Broadcasting, Inc., has twice been denied FAA approval for construction because of harmful interference to air navigation due to electromagnetic interference ("EMI"). Based upon the experience of Radix Broadcasting, Inc., Tennessee Instructional Radio concluded that Channel 298A at La Fayette is a defective allotment that should be deleted from the Table of Allotments.

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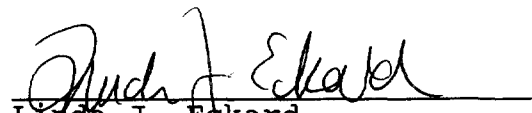
2. The inability of Radix Broadcasting, Inc., to obtain FAA approval from the sites applied for is representative of the conflict between the operation of Channel 298A at La Fayette and navigational devices serving the Chattanooga airport. The attached engineering statement from John J. Mullaney describes the area in which Channel 298A could locate while protecting adjacent stations consistent with the allocation rules. Five sites were selected within the periphery of the site window and are diagramed on Figure 2 attached to Mr. Mullaney's statement. Mr. Mullaney concludes that assuming operation of Channel 298A at 0.1 kilowatts ERP the FAA's Airspace Analysis computer model predicts interference to FAA navigational devices from each site. Thus, each site is as defective as those sites proposed by Radix Broadcasting, Inc. The five sites are representative of the entire area within which the channel could be located and thus there are no sites from which Channel 298A could be constructed and satisfy the FAA's concerns for air safety.

WHEREFORE, for the reasons stated in its Petition for Rule Making and this Supplement, Tennessee Instructional Radio requests that the Commission amend Section 73.202(b) to delete Channel 298A at La Fayette, Georgia, from the Table of FM Allotments.

Respectfully submitted,

TENNESSEE INSTRUCTIONAL RADIO

By:


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Suite 1100
Washington, D.C. 20036

Its Counsel

August 11, 1997

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ENGINEERING EXHIBIT EE-RM:

**TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI**

AUGUST 11, 1997

**ENGINEERING STATEMENT IN SUPPORT OF
A REQUEST TO DELETE
FM CHANNEL 298A FROM LA FAYETTE, GA
BECAUSE OF FAA EMI OBJECTIONS**

**ORIGINAL
SIGNATURE**

MULLANEY ENGINEERING, INC.

ENGINEERING EXHIBIT EE-RM:

**TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI**

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2. Narrative Statement.
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4. Figure 2, FM Channel 298A - Allowable Area Map.

MULLANEY ENGINEERING, INC.

DECLARATION

I, John J. Mullaney, declare and state that I am a graduate electrical engineer with a B.E.E. and my qualifications are known to the Federal Communications Commission, and that I am an engineer in the firm of Mullaney Engineering, Inc., and that firm has been retained by Tennessee Instructional Radio to support a petition to delete FM Channel 298A from La Fayette, GA, based upon Electro-Magnetic Interference (EMI) objections by the FAA. This exhibit simply presents the results of the FAA's Airspace Model computer program and documents the fact the FAA has consistently refused for the past five years to approve the proposed frequency and without their approval the FCC has similarly refused to grant the application for construction permit filed by Radix Broadcasting.

All facts contained herein are true of my own knowledge except where stated to be on information or belief, and as to those facts, I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.


John J. Mullaney

Executed on the 11th day of August 1997.

MULLANEY ENGINEERING, INC.

ENGINEERING EXHIBIT EE-RM:

**TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI**

NARRATIVE STATEMENT:

I. GENERAL:

This engineering statement has been prepared on behalf of Tennessee Instructional Radio. The purpose of this statement is to support a request to delete FM Channel 298A (107.5 mHz) from La Fayette, GA, based upon Electro-Magnetic Interference (EMI) objections by the Federal Aviation Administration (FAA). Since March 1992, when an application for this FM facility was first filed with the FCC, the FAA has consistently refused to approve the proposed frequency and without their approval the FCC has similarly refused to grant the application for construction permit. Tennessee Instructional Radio believes that the inability of the pending La Fayette applicant over the past five years to obtain FAA approval because of EMI concerns clearly makes this allotment technically defective and, therefore, it should be deleted from the FM Table of Allotments.

II. ENGINEERING DISCUSSION:

A. Pending Application:

Radix Broadcasting, Inc., has the only pending application (BPH-920304MH) before the FCC for the Ch. 298A facility at La Fayette, GA. As last amended in December of 1994, the application of Radix Broadcasting proposes to side mount its FM antenna on an existing tower with the following geographic coordinates:

Latitude: 34° 41' 38"
Longitude: 85° 16' 12"

It should be noted that since an existing tower will be used, with no change in overall height, the only grounds for objection by the FAA is that of EMI.

Figure 1 provides the technical parameters contained in the FCC Engineering Data Base for the La Fayette vacant allotment and for the pending application of Radix.

Figure 2 is a map which illustrates the area in which a site for Channel 298A would be properly spaced under Section 73.207. Because of the requirement to provide city grade 70 dBu service to La Fayette, only the western portion of this allowable area is available under the standard F(50,50) propagation curves.

B. FAA - Electro-Magnetic Interference:

An evaluation has been conducted using Version 4.21 of the FAA's Airspace Analysis Model - computer program which predicts EMI. Using Radix's presently pending ERP of 2.75 kW the program predicts 24 occurrences of BF interference to the RMG VOR and 1,775 occurrences of IM

interference to the CGW Localizer. It is for this reason the FAA has refused to approve the proposed operation on Ch. 298A at La Fayette by Radix.

The model was again run using an ERP of 0.1 kW (minimum Class A power). Even at this reduced level, it still predicted 8 occurrences of IM interference to the CGW Localizer (BF interference was no longer predicted).

While an operation by Radix which is limited to an ERP of 0.1 kW clearly provides a reduction in the number of occurrences of BF & IM interference the FAA has an official policy of **"ZERO TOLERANCE"**. Because it is a matter involving "safety of life" the FAA says that "even one occurrence" of interference is too much to risk.

The allowable area map, Figure 2, also shows the locations of the seven different potential tower sites for an operation on Ch. 298A. Those locations are the sites proposed by Radix, the FCC's official reference point and five additional hypothetical sites which have been scattered around the perimeter of the permissible area. It should be realized that not all of the hypothetical sites being evaluated are capable of providing the required city grade service to La Fayette but are included to evaluate the entire permissible area.

The following is a summary of the results from the FAA's EMI computer program for all of the seven sites evaluated herein at both the maximum and minimum permissible ERP for a Class A facility:

TENNESSEE INSTRUCTIONAL RADIO
RM TO DELETE CH. 298A - FAA EMI

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	6 kW		0.1 kW	
	BF ***	IM *****	BF **	IM ***
Radix	24	2,122	0	8
Vacant	23	2,342	0	8
Site 1	246	3,019	5	381
Site 2	4	2,858	0	30
Site 3	4	2,409	0	28
Site 4	4	2,035	0	18
Site 5	7	2,317	0	13

Again under the FAA's policy of **"ZERO TOLERANCE"** none of the seven sites presented above would receive approval from the FAA. While operation with a proposed ERP of 0.1 kW significantly reduces the number of occurrences it does not eliminate all such occurrences. While this is not an exhaustive evaluation of all potential sites it is a very representable sampling. There is no reason to believe that some other site within or near the permissible area will pass the FAA's "ZERO TOLERANCE" test.

Based upon this analysis it is believed that the FAA will never approve, because of EMI concerns, a proposal to operate Ch. 298A within or near the permissible area as defined by the FCC spacing rules for an area in the vicinity of the community of La Fayette, GA.

TENNESSEE INSTRUCTIONAL RADIO
RM TO DELETE CH. 298A - FAA EMI

MULLANEY ENGINEERING, INC.

III. SUMMARY:

Tennessee Instructional Radio herein requests that the FM Table of Allotments be modified to delete FM Channel 298A for La Fayette, Georgia. As demonstrated herein the allotment is "technically defective" in that it is impossible to obtain a Determination of No Hazard from the FAA because of Electro-Magnetic Interference (EMI). The FM allotment was originally adopted in 1992 and has had a construction permit application pending for that allotment since that time (over five years).

August 11, 1997.


John J. Mullaney

MULLANEY ENGINEERING, INC.

FIGURE 1

TECHNICAL PARAMETERS - LA FAYETTE ALLOTMENT

TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI

FM DATA BASE LAST UPDATED: 970731

Call: VACANT FA Ch. 298 A 107.5 mHz
State: GA City: La Fayette
Name: FCC Reference Point
File No.: Docket: 89-629
Coordinates: N 34-42-31 / W 85-13-33
Window Close: 920305 Window Open: 920204 FCC update: 930611

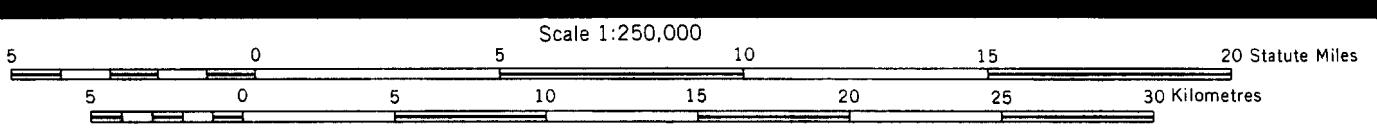
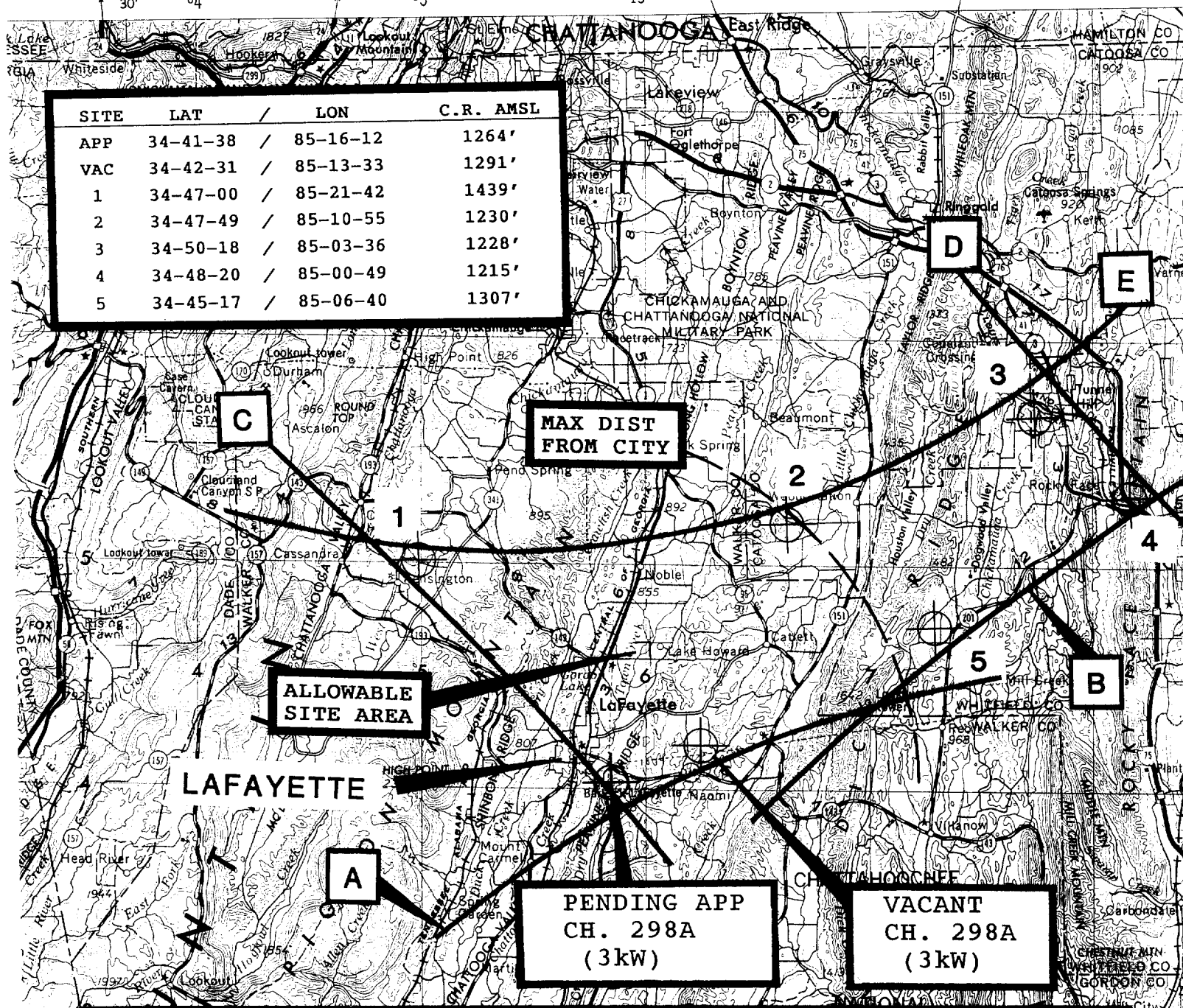
*** RULES COMMENTS *** Site Restricted Effective 2-3-92

* * * * *

Call: NEW APP FM Ch. 298 A 107.5 mHz
State: GA City: La Fayette
Name: Radix Broadcasting, Inc.
File No.: BPH920304MH
Coordinates: N 34-41-38 / W 85-16-12
Hor. | ERP(kw): 2.75 HAAT: 104 AMSL: 389 AGL: 42 (m)
Ver. | ERP(kw): 2.75 HAAT: 104 AMSL: 389 AGL: 42 (m)
Max HAAT: 165
73.215: N DA: N
Cutoff Date: 920811 FCC update: 950104

*** GENERAL COMMENTS *** Amended 941221

STRUCTURE TYPE: 2TOWER LAT: 34 41 38 LON: 085 16 12
FCC (FT): 1140.0 GND 152.0 AGL 1292.0 AMSL
(M): 347.48 46.33 393.81
FCC FILE NO: 5970-C2-P-69 FCC DATE: 062369
FAA FILE NO: 69-ATL-47-OE FAA DATE: 032469
OWNER:
ADDRESS: 3/4 M SE OF
CITY-STATE: LAFAYETTE GA



FM CHANNEL 298A - ALLOWABLE AREA MAP

TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI

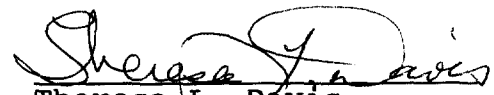
MULLANEY ENGINEERING, INC.
GAITHERSBURG, MARYLAND

FIGURE 2
AUGUST 1997

CERTIFICATE OF SERVICE

I, Theresa L. Davis, a secretary in the law offices of Roberts & Eckard, P.C., do hereby certify that a true and correct copy of the foregoing "Supplement to Petition for Rule Making" was sent this 11th day of August, 1997, by first-class mail, postage prepaid, to the following:

Mr. Rich Gwyn
Radix Broadcasting, Inc.
Box 746
La Fayette, GA 30728


Theresa L. Davis